

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,584DATE: 07/08/1999
TIME: 15:23:51

Input Set: I337584.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

*see p. 5***ENTERED**

1 <110> APPLICANT: Krieg, Arthur M.
2 Kline, Joel N.
3 <120> TITLE OF INVENTION: Methods of Treating Allergic and
4 Asthmatic Disorders Using Immunostimulatory Oligonucleotides
5 <130> FILE REFERENCE: C1039/7020/HCL
6 <140> CURRENT APPLICATION NUMBER: US/09/337,584
7 <141> CURRENT FILING DATE: 1999-06-21
8 <150> EARLIER APPLICATION NUMBER: US 08/960,774
9 <151> EARLIER FILING DATE: 1997-10-30
10 <150> EARLIER APPLICATION NUMBER: US 08/738,652
11 <151> EARLIER FILING DATE: 1996-10-30
12 <150> EARLIER APPLICATION NUMBER: US 08/386,063
13 <151> EARLIER FILING DATE: 1995-02-07
14 <150> EARLIER APPLICATION NUMBER: US 08/276,358
15 <151> EARLIER FILING DATE: 1994-07-15
16 <160> NUMBER OF SEQ ID NOS: 123
17 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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20 <212> TYPE: DNA
21 <213> ORGANISM: Artificial Sequence
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23 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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40 <400> SEQUENCE: 3
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42 <210> SEQ ID NO 4
43 <211> LENGTH: 15
44 <212> TYPE: DNA

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,584DATE: 07/08/1999
TIME: 15:23:51

Input Set: I337584.RAW

45 <213> ORGANISM: Artificial Sequence
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54 <220> FEATURE:
55 <223> OTHER INFORMATION: Synthetic Oligonucleotide
56 <400> SEQUENCE: 5
57 gagaacgtcg accttcgat 19
58 <210> SEQ ID NO 6
59 <211> LENGTH: 15
60 <212> TYPE: DNA
61 <213> ORGANISM: Artificial Sequence
62 <220> FEATURE:
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64 <400> SEQUENCE: 6
65 gcatgacgtt gagct 15
66 <210> SEQ ID NO 7
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68 <212> TYPE: DNA
69 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Synthetic Oligonucleotide
72 <400> SEQUENCE: 7
73 tccatgacgt tcctgatgct 20
74 <210> SEQ ID NO 8
75 <211> LENGTH: 20
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Synthetic Oligonucleotide
80 <400> SEQUENCE: 8
81 tccatgagct tcctgagtct 20
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83 <211> LENGTH: 20
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: Synthetic Oligonucleotide
88 <400> SEQUENCE: 9
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90 <210> SEQ ID NO 10
91 <211> LENGTH: 20
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:

PAGE: 3

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,584DATE: 07/08/1999
TIME: 15:23:51

Input Set: I337584.RAW

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121 <221> NAME/KEY: modified_base
122 <222> LOCATION: (7)...(7)
123 <223> OTHER INFORMATION: m5c
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135 <223> OTHER INFORMATION: m5c
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142 <220> FEATURE:
143 <223> OTHER INFORMATION: Synthetic Oligonucleotide
144 <400> SEQUENCE: 15

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,584

DATE: 07/08/1999

TIME: 15:23:51

Input Set: I337584.RAW

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155 <223> OTHER INFORMATION: m5c
156 <220> FEATURE:
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158 <222> LOCATION: (10)...(10)
159 <223> OTHER INFORMATION: m5c
160 <220> FEATURE:
161 <221> NAME/KEY: modified_base
162 <222> LOCATION: (14)...(14)
163 <223> OTHER INFORMATION: m5c
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175 <223> OTHER INFORMATION: m5c
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181 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Synthetic Oligonucleotide
184 <220> FEATURE:
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187 <223> OTHER INFORMATION: m5c
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192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
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PAGE: 5

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PATENT APPLICATION US/09/337,584

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Input Set: I337584.RAW

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197     atggaaggtc caacgttctc                                20
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201 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:
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204 <400> SEQUENCE: 20
205     gagaacgctg gaccttccat                                20
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207 <211> LENGTH: 20
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
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211 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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215 <211> LENGTH: 20
216 <212> TYPE: DNA
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221     gagaacgctc gaccttcgat                                20
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224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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233 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Synthetic Oligonucleotide
236 <220> FEATURE:
237 <221> NAME/KEY: modified_base
238 <222> LOCATION: (6)...(6)
239 <223> OTHER INFORMATION: m5c
240 <400> SEQUENCE: 24
241     gagaangctg gaccttccat                                20
242 <210> SEQ ID NO 25
243 <211> LENGTH: 20
244 <212> TYPE: DNA

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: I337584.RAW

Line	? Error/Warning	Original Text
125	W "N" or "Xaa" used: Feature required	gctagangtt agcgt
137	W "N" or "Xaa" used: Feature required	gctagacggt agngt
165	W "N" or "Xaa" used: Feature required	atngactctn gagngttctc
177	W "N" or "Xaa" used: Feature required	atngactctc gagcgttctc
189	W "N" or "Xaa" used: Feature required	atcgactctc gagcgttntc
241	W "N" or "Xaa" used: Feature required	gagaangctg gaccttccat
253	W "N" or "Xaa" used: Feature required	gagaacgctg gacnttccat
297	W "N" or "Xaa" used: Feature required	tccatgtngg tcctgatgct
309	W "N" or "Xaa" used: Feature required	tccatgtcgg tnctgatgct
409	W "N" or "Xaa" used: Feature required	gctagacntt agtgt
421	W "N" or "Xaa" used: Feature required	tccatgtngt tcctgatgct
1001	W "N" or "Xaa" used: Feature required	atcgactctc gagngttctc
1013	W "N" or "Xaa" used: Feature required	gctagangtt agtgt
1061	W "N" or "Xaa" used: Feature required	tccatgtngt tcctgtngtt